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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/660,753	09/13/2000	Chin-Huang Chang	6319-56134	7237

7590 09/20/2002

Klarquist Sparkman Campbell  
Leigh & Whinston LLP  
One World Trade Center Suite 1600  
121 S W Salmon Street  
Portland, OR 97204

EXAMINER

VINH, LAN

ART UNIT	PAPER NUMBER
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1765

DATE MAILED: 09/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/660,753

Applicant(s)

CHANG, CHIN-HUANG

Examiner

Lan Vinh

Art Unit

1765

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 09 September 2002 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See attachment.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 1-20.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_

***Response to Arguments***

1. Applicant's arguments filed 9/9/2002 have been fully considered but they are not persuasive.

The applicants argue that there are four significant differences between the claimed invention and the cited prior art of Dery. The first difference is that the claimed invention etches the chip from the second surface having no connection devices thereon whereas Dery etches the surface 211 which has connection device. The examiner disagrees because since fig. 2C of Dery shows a chip 220 having second surface 210 ( surface 210 has no connection device being exposed to plasma 216 ) being exposed to plasma 216 and Dery also discloses that a plasma is used to modify the surface of an IC chip, the examiner asserts that Dery discloses etching the chip from the second surface having no connection devices. The second difference is that the etching according to the present invention performs a function of removing part of volume of a semiconductor chip from the second surface thereof that has no connections devices thereon while the etching according to Dery performs a function of modify the structure of a surface of a chip. This argument does not commensurate with the scope of claims 1, 11 because the claim language of " removing part of volume of a semiconductor chip from the second surface thereof that has no connections devices thereon" is not recited in claims 1 and 11. The third difference is that the object of the present invention is to reduce the size (thickness) of a semiconductor chip while the object of Dery is to enhance the adhesion between encapsulant and a chip. The examiner disagrees because although Dery does not explicitly discloses reducing the

Application/Control Number: 09/660,753

Art Unit: 1765

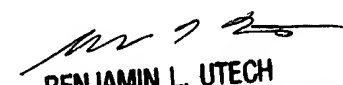
size (thickness) of the semiconductor chip, Dery clearly discloses using plasma etching to modify the surface of the chip. Since etching is known in the art as a process of removing material/reducing thickness of a material from the substrate, Dery's teaching of plasma etching to modify the surface of the chip, as interpreted by the examiner, reads on reducing the size (thickness) of a semiconductor chip. The fourth difference is that the object device treated by etching according to the present invention is a chip seated on a chip carrier while Dery's object device seated on an electrode. This argument is not found persuasive because as clearly discloses in col 5, lines 41-43 of Dey, Dery discloses a chip 210 seated on chip carrier 220.

### ***Conclusion***

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Vinh whose telephone number is 703 305-6302. The examiner can normally be reached on M-F 8:30-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin Utech can be reached on 703 308-3836. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872-9310 for regular communications and 703 872-9311 for After Final communications.

LV  
September 18, 2002

  
BENJAMIN L. UTECH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700